

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (withdrawn): A vaccine comprising an immunogenic amount of a protein of 17 kDa as determined by SDS PAGE encoded by one of SEQ ID NO: 1, SEQ ID NO:3, or SEQ ID NO: 5, with or without an adjuvant, for administering either intraperitoneally, by immersion, or orally or by any other combination of routes to a poikilothermic fish for protecting a poikilothermic fish against infection by the bacterial pathogen *Piscirickettsia salmonis*.

Claim 2 (withdrawn): The vaccine of claim 1, wherein said protein is post-translationally modified into a lipoprotein.

Claim 3 (withdrawn): The vaccine of claim 1, wherein said protein is fused to at least one other protein or protein fragment either at the N or C terminus or both.

Claim 4 (currently amended): A vaccine comprising an immunogenic amount of a an isolated protein of 16 kDa as determined by SDS PAGE, said protein comprising an amino acid sequence of one of SEQ ID NO: 2, SEQ ID NO: 4, or SEQ ID NO: 6 ~~with or without an adjuvant, for administering either intraperitoneally, by immersion, or orally or by any other combination of routes to a poikilothermic fish~~ for protecting a poikilothermic fish against infection by the bacterial pathogen *Piscirickettsia salmonis*.

Claim 5 (currently amended): The vaccine of claim 4, wherein said isolated protein is lipidated ~~or variants thereof are post-translationally modified into a lipoprotein~~.

Claim 6 (currently amended): The vaccine of claim 4, wherein said isolated protein is fused to at least one other protein ~~or protein fragment~~ either at the N or C terminus or both.

Claim 7 (withdrawn): A method of protecting a poikilothermic fish against infection by the bacterial pathogen *Piscirickettsia salmonis* comprising administering a vaccine comprising an immunogenic amount of a protein of 17 kDa as determined by SDS PAGE encoded by one of SEQ ID NO: 1, SEQ ID NO: 3, or SEQ ID NO: 5 with or without an adjuvant to a poikilothermic fish either intraperitoneally, by immersion, or orally or by any other combination of routes.

Claim 8 (withdrawn): The method of claim 7 wherein said protein is post-translationally modified into a lipoprotein.

Claim 9 (withdrawn): The method of claim 7, wherein said protein is fused to at least one other protein or protein fragment either at the N or C terminus or both.

Claim 10 (withdrawn): A method of protecting a poikilothermic fish against infection by the bacterial pathogen *Piscirickettsia salmonis* comprising administering a vaccine comprising an immunogenic amount of a protein of 16 kDa as determined by SDS PAGE, said protein comprising the amino acid sequence of one of SEQ ID NO: 2, SEQ ID NO: 4, or SEQ ID NO: 6 with or without an adjuvant to a poikilothermic fish either intraperitoneally, by immersion, or orally or by any other combination of routes.

Claim 11 (withdrawn): The method of claim 10 wherein said protein is post-translationally modified into a lipoprotein.

Claim 12 (withdrawn): The method of claim 10, wherein said protein is fused to at least one other protein or protein fragment either at the N or C terminus or both.

Claim 13 (new): The vaccine of claim 4, further comprising an adjuvant.

Claim 14 (new) The vaccine of claim 4, wherein the vaccine does not comprise and adjuvant.